CLAIMS

What is claimed is:

1. A method for testing a head gimbal assembly, comprising:
inputting a control command to perform a long or a full seek operation;
measuring a frequency response of the head gimbal assembly to the control command; and
comparing the frequency response to a master frequency response.

2. The method of claim 1, further comprising the step of positioning the head gimbal assembly at a predefined position before inputting the control command.

3. The method of claim 1, further comprising the step of measuring an oscillation of the head gimbal assembly after inputting the control command and performing a fourier transformation of the measured oscillation in order to obtain the frequency response.

4. The method of claim 2, further comprising the step of measuring an oscillation of the head gimbal assembly after inputting the control command and performing a fourier transformation of the measured oscillation in order to obtain the frequency response.

5. The method of claim 1, wherein the measurement is performed by means of a laser measurement system.

6. The method of claim 5, wherein a laser of the measurement laser system is directed into a transversal direction onto the head gimbal assembly for measurement of the oscillation.

7. The method of claim 1, further comprising the step of adjusting a mechanical property of the head gimbal assembly for shifting the frequency response into the direction of the master frequency response.

8. The method of claim 7, wherein the step of adjusting a mechanical property is performed by weakening the head gimbal assembly or by adding a dampening element.

9. A system for testing a head gimbal assembly, the system comprising:
means (54) for inputting a control command to perform a long seek operation;
means (55) for measuring a mechanical frequency response of the head gimbal assembly to the long seek operation;
means (57) for comparing the mechanical frequency response to a master frequency response (58).

10. The system of claim 9, further comprising means for measuring an oscillation of the head gimbal assembly and means for performing a fourier transformation for the measured oscillation.

11. The system of claim 9, wherein the means for measuring the mechanical frequency response comprises a laser measurement system for directing a measurement laser onto the head gimbal assembly in a transversal direction.

12. The system of claim 10, wherein the means for measuring the mechanical frequency response comprises a laser measurement system for directing a measurement laser onto the head gimbal assembly in a transversal direction.

13. The system of claim 9, further comprising means for controlling a trimming device (59) for adjusting a mechanical property of the head gimbal assembly in order to move the mechanical frequency response in a direction of the master frequency response.

14. The system of claim 10, further comprising means for controlling a trimming device (59) for adjusting a mechanical property of the head gimbal assembly in order to move the mechanical frequency response in a direction of the master frequency response.

15. The system of claim 11, further comprising means for controlling a trimming device (59) for adjusting a mechanical property of the head gimbal assembly in order to move the mechanical frequency response in a direction of the master frequency response.

16. The system of claim 12, further comprising means for controlling a trimming device (59) for adjusting a mechanical property of the head gimbal assembly in order to move the mechanical frequency response in a direction of the master frequency response.

17. The system of claim 13, the trimming device comprising a trimming laser.

18. A head gimbal assembly, comprising a trimming element (62) for adjusting a mechanical property in order to approximate a frequency response of the head gimbal assembly to a master frequency response.

19. The head gimbal assembly of claim 18, wherein the trimming element is adapted to be selectively removed by means of a trimming laser.